Accounting Choices Determinants underlying The Positive Accounting Theory

Paper

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Abstract

The positive accounting theory (PAT) hypothesizes that, in imperfect markets, accounting choice may be determined by managers seeking to influence reported earnings and capital structure (Watts and Zimmerman, 1978). In particular, the positive accounting theory (PAT) argues that accounting choices are likely to be motivated by factors such as managers' bonus plans, the firm's debt/equity ratios and the wider political influence of third parties (Watts and Zimmerman, 1978; 1986).

In this paper I examine the determinants and consequences of accounting choice, structuring around the three types of market imperfections that influence managers' choices: agency costs, information asymmetries, and externalities affecting non-contracting parties.

Keywords: Accounting Choices; Positive Accounting Theory; Earnings Management.

1. Introduction:

With complete and perfect markets, there is no substantive role for financial disclosures and thus no demand for accounting or accounting regulation. However, in our world of imperfect and incomplete markets, the demand for accounting and accounting regulation implies that accounting disclosures and accounting-based contracts are efficient ways of addressing market imperfections.

The Definition of Positive Accounting Theory

The positive theory is a theory that seeks to explain and predict particular phenomena.

According to (Watts and Zimmerman, 1990, p. 148) the use of the term positive research was popularized in economists and was used to distinguish research which sought to explain and predict (which is positive research), from research which aimed to provide prescription (prescriptive research is often labeled normative research).

Positive Accounting Theory is concerned with explaining accounting practice. It is designed to explain and predict which firms will and which firms will not use a particular method, but it says nothing as to which method a firm should use.

The Definition of Accounting Choice

An accounting choice is any *decision* whose primary purpose is to influence (either in form or substance) the output of the accounting system in a particular way, including *not only* financial statements published in accordance with GAAP, *but also* tax returns and regulatory filings. (Fields et al, 2001).

This definition is broad enough to include:

- The choice of LIFO vs. FIFO.
- The choice to structure a lease so that it qualifies for operating lease treatment
- The choices affecting the level of disclosure
- and choices in the timing of adoption of new standards.

This definition also include *real decisions* made primarily for the purpose of affecting the accounting numbers in this definition, for example:

- Increasing production to reduce cost of goods sold by reducing per unit fixed costs,
- Reducing R&D expenditures to increase earnings.

The Managerial intent is key to this definition of accounting choice, particularly with respect to real decisions; that is, whether the impetus behind the decision is to affect the output of the accounting system or whether the impetus derives from other motives. (Fields et al, 2001).

Managers make accounting choices through their decisions about what, how, and when to apply certain principles. This can influence perceived performance - the consequences of accounting choices.

2. Types of Accounting Choices:

Managers make accounting choices that may be either, relatively:

1. *Conservative* – with accounting choices that *understate* earnings.
    1.1 Recognizing revenue when (a) the service is provided (not before), (b) customers know the price, and (c) when cash is collected or its collection is reasonably certain.
    1.2 Expense recognition – costs are associated and reported with revenue recognition – matching.
    1.3 LIFO for cost of goods sold (COGS), for Inventory value.
    1.4 Expensing – not capitalizing – most costs.

1. *Aggressive* – with accounting choices that *overstate* earnings.
    1.1 Recognizing revenue when cash is received (a) the service is provided (not before) (b) customers know the price, and (c) when cash is collected or anticipated.
    1.2 Expense recognition of costs when service is provided or cash is received.
    1.3 FIFO for cost of goods sold (COGS), for Inventory value.
    1.4 Capitalizing – and Amortizing – big costs.

3. Reasons for accounting choice

However, unconstrained accounting choice is likely to impose costs on *financial statement users,* because *preparers* are likely to have incentives to convey self-serving information.

For example, managers may choose accounting methods in self-interested attempts to increase the stock price prior to the expiration of stock options they hold.

On the other hand, the same accounting choices may be motivated by managers' objective assessment that the current stock price is undervalued (relative to their private information).

In practice, it is difficult to distinguish between these two situations, but it is the presence of such mixed motives that makes the study of accounting choice interesting. (Fields et al, 2001).

Because of these conflicting motives, *contracting parties* restrict the choices available to decision makers. (Watts and Zimmerman, 1986).

In addition, accounting regulators recently have voiced concerns about GAAP providing too much choice. (Levitt, 1998).

Therefore, regulators must understand the advantages and disadvantages of allowing choice and determine the *"optimal"* level of discretion.

Researchers find it interesting to explore why, for example, GAAP permits distinct choices (e.g., LIFO/FIFO, purchase/pooling) rather than just providing for judgment in areas that are not dichotomous (e.g., revenue recognition).

The implications of accounting choice to achieve a goal are consistent with the idea of *earnings management*.

Earnings management occurring when managers exercise their discretion over the accounting numbers with or without restrictions. Watts and Zimmerman (1990).

Alternative definitions of earnings management include those of (Schipper, 1999) and (Healy and Wahlen, 1999).

(Schipper, 1999) defines *earnings management* as ‘‘implementation that impairs an element of decision usefulness or implementation that is inconsistent with the intent of the standard’’.

(Healy and Wahlen, 1999), on the other hand, define *earnings management* as occurring when ‘‘managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers’’.

4. Rule-Based Versus Principle-Based Accounting:

By contrast, one can imagine *an accounting system that is entirely rule based*, with no room for judgment.

For example, such a system could specify that the allowance for un-collectibles is always 10% of receivables, that equipment is depreciated straight line over 5 years, and that all marketable securities are to be treated as if they were available for sale.

Indeed, *tax accounting* has some of those characteristics.

Critics of a rules-based approach argue that it leads to an obvious problem with a rigid accounting system is providing rules for all facts and circumstances.

In addition, new situations arise regularly (e.g., debt/equity hybrids, securitizations) requiring that new accounting rules be devised.

Specific choices made can be informative, as suggested above, and such information is lost when the accounting system does not provide for judgment.

SEC, for example, argues that bright-line rules-based standards, which used by FASB "often provide a vehicle for circumventing the intention of the standard" (SEC 2003, p. 1). This circumvention enables firms to structure transactions strategically and select accounting practices that achieve their financial goals.

Critics of a principles-based approach argue that financial statements would likely lose their comparability and consistency across industries and issues regarding income measurement and recognition would remain controversial

Other view is that principles-based standards require executives to "apply professional judgment" to determine the appropriate way to record a business transaction. (Mergenthaler, 2009).

Overall, accounting choice likely exists because it is impossible, or infeasible, to eliminate it. (Fields et al, 2001).

5. Classification of accounting choice

From the literature, I can identify at least three categories of motivations for accounting choices: (a) contracting (b) asset pricing and capital market factors and (c) the influence of external parties. This classification is consistent with the (Watts and Zimmerman, 1986), (Field et al., 2001), and (El-Habashy, 2004).

1. Contractual motivations.
   1.1 Internal agency conflicts–executive compensation.
   1.2 External agency conflicts–bond covenants.
2. Asset pricing motivations.
   2.1 Disclosure policies.
   2.2 Earnings management.
3. Motivation due to impact on third parties.
   3.1 Taxes.
   3.2 Regulation.

5.1 Contractual motivations:

The first category of market imperfections stems from the presence of agency costs and the absence of complete markets.

Accounting choice is determined to influence one or more of the firm's contractual arrangements.

Many contractual arrangements structured to mitigate internal (owner manager) and external (bondholder–shareholder and current owner–potential owner) agency conflicts rely, at least in part, on financial accounting numbers.

For example, management compensation contracts and bond covenants are frequently based on reported financial accounting numbers. (Healy, 1985 and Smith and Warner, 1979).

Positive accounting theory (Watts and Zimmerman, 1978, 1986) provides the motivation for many studies of whether such contracts provide incentives to managers to choose among accounting methods to achieve desired financial reporting objectives.

In general, researchers conclude that their results suggest that incentives work: *managers select accounting methods to increase their compensation and to reduce the likelihood of bond covenant violations.*

5.1.1 Internal agency conflicts–executive compensation

The impact of executive compensation contracts (particularly bonus plans) on firms' accounting choices is one of the most thoroughly investigated areas of empirical accounting choice research.

Managerial compensation typically consists of base salary and incentive compensation.

Short-term bonus contracts are often tied to reported accounting performance measures such as net income, ROA and ROE, whereas longer-term incentive compensation is often tied to stock performance. (Fields et al, 2001).

5.1.2 External agency conflicts–bond covenants

Lending agreements rely on reported accounting numbers, and these contracts allow companies discretion *to select and change accounting methods subsequent to the debt issuance.*

- The managers select or change accounting methods to avoid covenant violations.
- Firms are more likely to be adversely affected by mandated accounting changes by analyzing stock price reactions around the announcement of, or the lobbying behavior prior to, mandated accounting changes.

5.2 Asset pricing motivations.

The second category of accounting choice examines the association *between accounting numbers (earnings) and stock prices or returns*, examining whether accounting method choice affects equity valuation or the cost of capital.

Managers' choices of accounting methods, consistent with the goal of influencing stock prices, can take several forms; managers may maximize earnings in a given period, smooth earnings over time, avoid losses, or avoid earnings declines (among other strategies). (Fields et al, 2001).

5.2.1 Disclosure policies

(Botosan, 1997) finds a negative association *between the level of disclosure*, as measured with a self-constructed quality of disclosure index, *and the cost of capital*, after controlling for firm size and beta.

So (Botosan, 1997) interprets this result as suggesting a trade-off between *corporate disclosures* and *alternative sources of information*.

In another study on disclosure policy, Sengupta (1998) finds results similar to (Botosan, 1997)'s for *the cost of debt*, using a measure of *corporate disclosure practices* provided by the Association of Investment Management and Research (AIMR).

Despite of the interesting results of both (Botosan, 1997) and (Sengupta, 1998) studies, (higher disclosure levels results in lower costs of capital), It's necessary to explain *why* all firms do not select the highest possible disclosure level.

One obvious *answer* is that such behavior is constrained by other motives such as third-party effects (e.g., concerns about disclosing information to competitors or regulators).

5.2.2 Earnings management

Managers act as if they believe users of financial reporting data can be misled into interpreting reported accounting earnings.

(Gaver et al., 1995) find evidence that when *earnings before discretionary accruals fall below the lower bound* (in a bonus plan) *managers select income-increasing accruals* (and vice versa).

In a related study, (DeFond and Park, 1997) present evidence that when current earnings are poor and expected future earnings are good, managers, motivated by

concerns over job security, borrow earnings from the future for use in the current period (and vice versa).

The managers accomplish this *income smoothing* using discretionary accruals.

The above studies all report evidence of earnings management via choices of accounting methods, but none document any associated price reactions to these choices. In other words, these studies *do not explore* whether these accounting choices have economic implications.

(Guthrie et al. 2011), and (Henry 2009) studied the extent of opportunistic election of the fair value option, under SFAS No.159.

(Guthrie et al. 2011) design two earnings management tests (current, future earnings management) that incorporate the financial instruments elected for fair value measurement.

In their test of current earnings management, they examine firms whose earnings meet or beat analysts' consensus earnings forecasts only with the help of unrealized gains from elected financial instruments.

In their test of future earnings management, they examine firms that accelerate the recognition of losses as transition adjustments to retained earnings on the balance sheet instead of realizing these losses in future income statements.

They do not find evidence of systematic opportunistic election of the fair value option. In only a handful of cases— concentrated among early adopters with an earnings shortfall—did firms experience a significant improvement in current or future earnings that casts doubt on whether their adoption was keeping with the intent and spirit of the standard.

(Cazavan-Jeny et al., 2011) studied whether managers should have the discretion to choose to capitalize or expense certain R&D expenditures is the central issue in the debate on reporting for R&D.

Since 2005, all listed firms in European Union (EU) countries have been obliged to prepare their annual reports in compliance with International Financial Reporting Standards (or IFRS/IAS). IAS 38 is disputed, since while it generally prescribes expensing for research expenditures, it also requires capitalization of certain

development expenditures, whereas the national GAAP in certain European countries (e.g. France) leave firms the choice.

Proponents of capitalization argue that it allows managers to convey important inside information about the future performance of the R&D program, and therefore about the future performance of the firm if the information turns out to be correct (Lev and Zarowin, 1999, p. 377).

Opponents of R&D capitalization argue that it creates opportunities for managers to manipulate earnings by accelerating or delaying amortization of R&D expenditures on projects with a low probability of success (AIMR, 1993; Prencipe et al., 2008).

(Cazavan-Jeny et al., 2011) results suggest that the accounting flexibility offered by French GAAP (and UK GAAP), which allow R&D capitalization, does not lead to increased earnings quality. The most charitable explanation is that it is apparently difficult for managers to predict the future performance of R&D projects; however, our results are also consistent with managers taking advantage of this accounting flexibility for earnings management purposes.

5.3 Motivation due to impact on third parties.

5.3.1 Taxes.

One branch of research into tax-based motivations for accounting choice is structured around changes in tax rates.

The accounting choice literature considers that firms choose accounting methods to minimize the present value of taxes.

For example, (Dhaliwal and Wang, 1992) report evidence that affected firms adjusted accounting numbers by shifting permanent and timing differences across periods to minimize the tax impact of the alternative minimum tax

Another example, for firms facing (probable) increases in inventory costs, the choice of LIFO results in (probable) incremental cash inflows due to tax savings and value-maximizing managers would thus be expected to choose LIFO. However, in the presence of conflicting goals, managers may not choose LIFO and

there is a substantial literature that explores managers' choice of accounting methods when there are tax implications. (Fields et al, 2001).

Another branch of research into tax-based motivations for accounting choice examines the effect of tax rate changes on the accounting choices of multinational corporations (MNCs).

In particular, Tax Reform Act of 1986 (TRA'86) caused MNCs to shift income into the U.S. and those firms with greater flexibility to shift more income did, in fact, do so (Harris, 1993; Klassen et al., 1993).

In addition, U.S. MNCs facing average foreign tax rates in excess of the U.S. tax rate exhibit stronger evidence of tax motivated income shifting than other U.S. MNCs (Collins et al., 1998). Furthermore, Klassen et al. cannot provide a convincing explanation for why MNCs *reversed* their actions and shifted income *out of the U.S. after TRA'86*.

5.3.2 Regulation

Most of the research into the effect of regulation on accounting choice is based on industry-specific regulations focuses on accounting responses to specific constraints (such as the capital adequacy ratio guidelines in the banking industry).

One cluster of research focuses on the regulatory costs imposed by capital adequacy ratio guidelines in the banking industry.

In the banking industry, There is evidence that managers attempt to avoid such costs by adjusting loan loss provisions, loan charge-offs and securities gains and losses (Moyer, 1990); by manipulating accruals (Kim and Kross, 1998); and by adopting voluntary regulatory accounting principles (Blacconiere et al., 1991).

The authors' interpretation of their results imply that; banking regulatory authorities make and change the regulations on capital requirements without considering the incentive effects on the financial institutions.

In the insurance industry, Petroni (1992) finds that insurers bias downward their loss reserves when they are 'close' to receiving regulatory attention (she also finds evidence that poor performance in general leads to an overstatement of asset values).

Similarly, (Adiel, 1996) finds that insurers enter into costly financial reinsurance transactions to reduce regulatory costs.

In summary, the regulation literature generally concludes that managers select accounting methods to avoid regulatory intervention.

Implicitly, this research suggests that there are information costs in the political process such that there is some probability that the regulators will not detect or adjust for the accounting manipulation.

6. Conclusions:

The Positive Accounting Theory developed by Watts and Zimmerman (1978; 1986) hypothesizes that accounting choices are partly influenced by managerial opportunism.

In particular, The Positive Accounting Theory researchers hypothesized that to avoid violating debt covenants and to increase their own remuneration when it is associated with company earnings, managers will often prefer income-increasing accounting methods.

In contrast, it has been hypothesized that if there appears to be a likelihood of politically imposed costs because of the appearance of high levels of income and wealth managers will choose income-decreasing methods. (El-Habashy, 2004).

Overall, the literature has indicated that accounting-policy choices may be determined by some explanatory variables related to the following characteristics of the firm: (i) whether a firm employs management bonus schemes or not; (ii) its leverage characteristics and (iii) its size as a proxy for the firm's political costs.

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